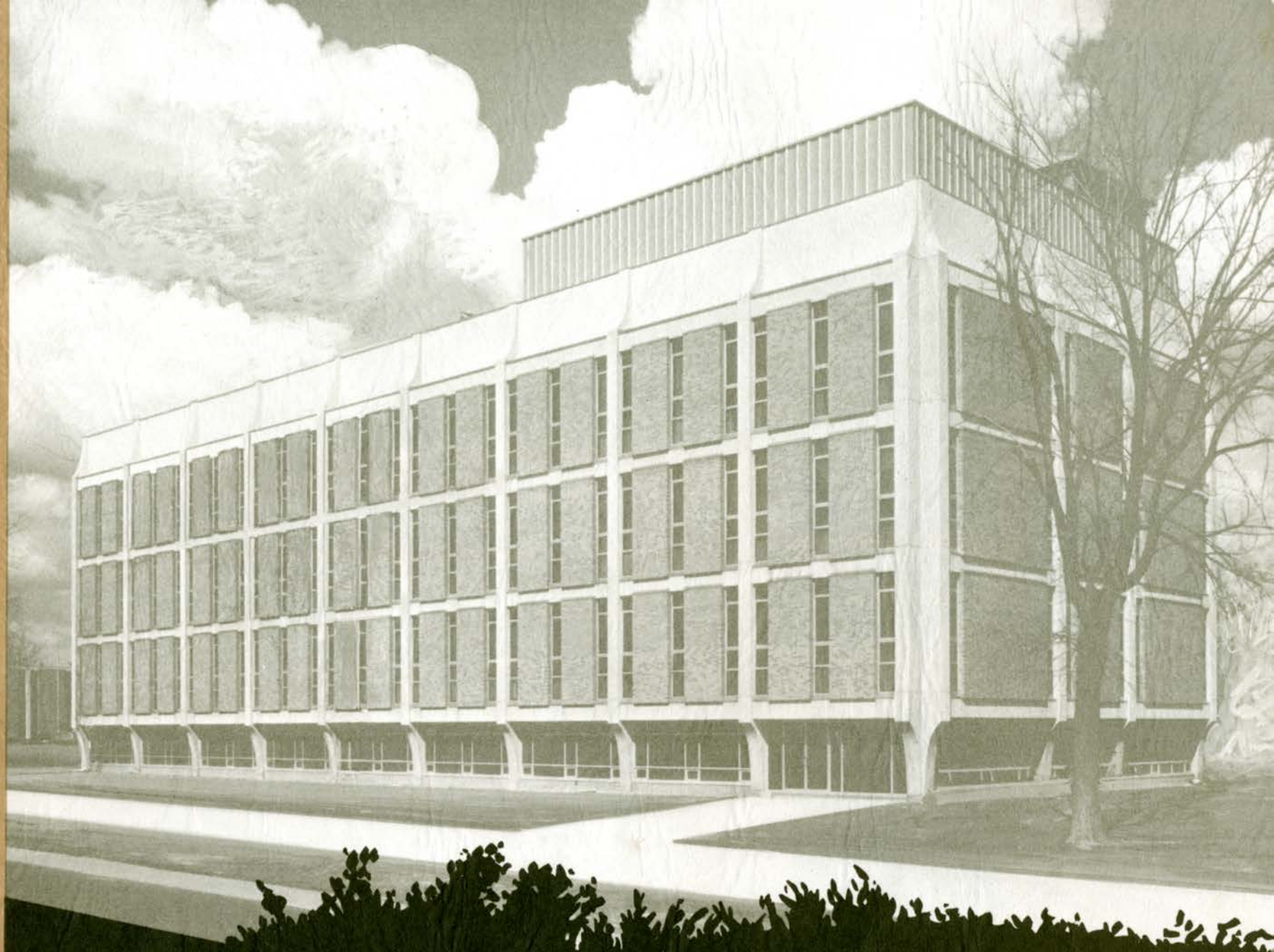


# B I O L O G Y



NEW FACILITIES AT  
UNIVERSITY OF WINDSOR





The original Assumption College, built in 1857 and demolished in 1965, garrisoned British troops during the Fenian Raids.

## TRADITION, EXPERIENCE . . .



New enterprises flourish best in a soil well cultivated by experience, tradition and accomplishment.

The new, non-denominational University of Windsor, launched in 1963, began with a campus, physical plant and traditions dating back to the establishment of Assumption College (later Assumption University) in 1857, and based upon the pioneering work of the Basilian Fathers since 1870.

Even in the first years of the 20th century, Assumption in its classical courses included "natural philosophy" which required a fee of \$5 "for use of philosophical instruments" beyond an annual tuition fee of \$40, so instruction in science was not disregarded. Many graduates went on to careers in science, medicine and engineering.

From 1919 to 1953, Assumption, as an affiliate of the University of Western Ontario in London, offered science courses which, by 1928, required separate laboratories for Biology, Chemistry and Physics. Rev. Dr. T. A. MacDonald, C.S.B., a former Superior of Assumption College, directed biology courses from 1928 to 1941. For 19 years (1945-64), Rev. A. J. Grant, C.S.B., headed the Biology Department and laid the foundations for its current development.

Course offerings began to expand in the early Thirties and accelerated in the Forties, especially after construction in 1948 of the Memorial Science Building, honoring Assumption students who had given their lives in two world wars.

With the establishment of the affiliated Essex College in 1956, primarily to teach the pure and applied sciences with the assistance of Province of Ontario grants, expansion of courses, physical facilities, post-graduate courses and research accelerated again.

From 1964 to 1966, the Biology department occupied all of Memorial Science Hall (now converted to closed-circuit TV and re-named "Memorial Hall"), and moved into the new Biology Building in January, 1966. Completed at a cost of \$1,700,000, it provides laboratories, research space, seminar rooms and other facilities for the Biology Department's share of an expected enrolment of 5,000 full-time students at University of Windsor by 1970.





North campus of University of Windsor faces City of Detroit across Detroit River

## ... CULTIVATE NEW PROSPECTS

The New Biology Building at the University of Windsor, occupied early in 1966, provides the most modern laboratory facilities and equipment available.

Faculty members planned the building over a two-year period, with special consideration for the inter-relationship of teaching and research. The result is a building in which research areas, labs and seminar rooms are strategically located to facilitate close contact between professors and students in their exploration of the frontiers of Biology.

The building has a total floor area of more than 60,000 square feet, with a net useable space of 45,000 square feet. This space is organized into several well-defined units, each concerned with a different aspect of biology, located on the five floors. Most of this space is about equally divided between teaching and research areas, with the remainder used for seminar rooms, museum, stockroom, shop, offices and service areas.

The department offers B.Sc. general and honours courses (the latter since 1957), as well as programs leading to M.Sc. (1959) and Ph.D. degrees (1964). Graduate facilities and areas of research activity pursued in the department are indicated in subsequent pages.



J. F. Leddy  
D.Phil., D.Litt., D. ès L., LL.D.,  
D.C.L.  
Vice-Chancellor and President



Rev. N. J. Ruth  
C.S.B., M.A.  
Dean of Arts and Science



R. J. Doyle  
Ph.D.  
Head, Biology Department



Rev. A. J. Grant, C.S.B., M.A.  
Head, Biology Department  
(1945-64)



## New Facilities Aid Co-ordination

To meet the challenges of the rapidly developing fields of biology and the need to cater to steadily increasing enrolment at the University of Windsor, the Department of Biology has designed new facilities to provide adequate training and conveniences for both students and faculty in study and research.

Six introductory laboratories, each about 1,000 square feet in area, serve freshman students in general biology, botany and zoology. These are designed in general for a maximum of 24 students. Each pair of laboratories is equipped with its own preparation room and teaching materials.

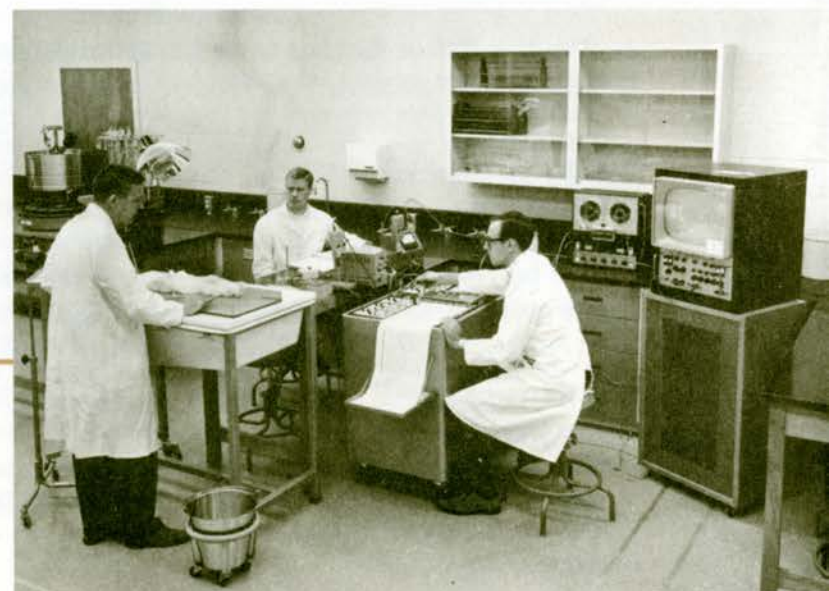
Several undergraduate laboratories of specialized nature, each approximately 1,000 square feet in area, include those for cytology, histology, cell and animal physiology and vertebrate and invertebrate zoology. These laboratories are fully equipped with adjoining preparation rooms and teaching materials and have a capacity of 24 students. A cold room is located close to these laboratories.

Three advanced botany laboratories on the second floor serve students in plant anatomy and morphology, plant physiology and plant pathology. They are equipped with modern instruments to handle 12 or 16 students. A walk-in cold room and deep-freeze on this floor allows low-temperature experimentation and permits storage of materials.

The microbiology section is located on the third floor. Three laboratories, about 1,000 square feet in area, serviced with walk-in cold rooms and incubators, serve students in general microbiology, immunology and serology, virology, etc.



TYPICAL INTRODUCTORY COURSE LABORATORY



PHYSIOLOGY EXPERIMENT IN PROGRESS





PORTION OF COMPARATIVE ANATOMY LABORATORY



CLASS IN ECOLOGY COLLECTING SPECIMENS



CORNER OF TYPICAL RESEARCH LABORATORY

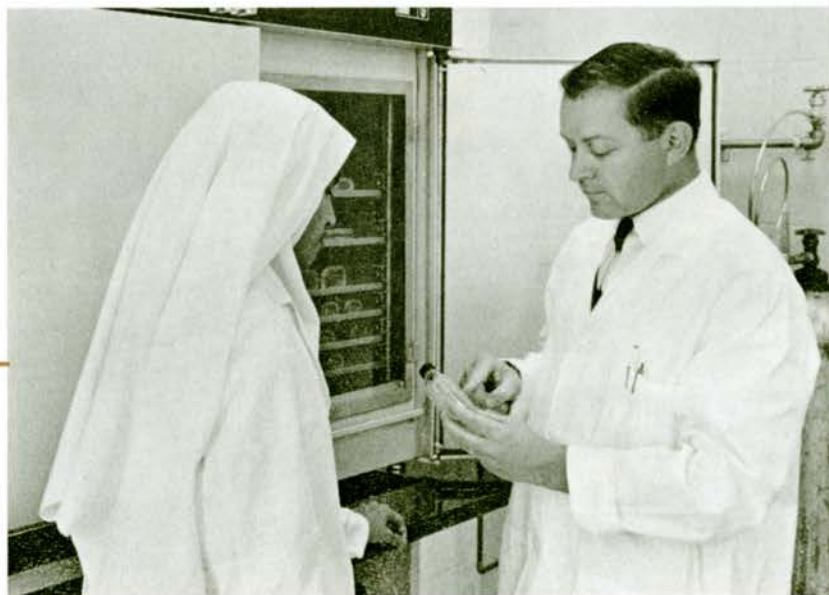


LABORATORY GROUP IN HISTOLOGY





WASHING FACILITIES IN ANIMAL QUARTERS



SECTION OF THE VIROLOGY LABORATORY

## Graduate Studies Are Diverse

Graduate studies and research constitute an important departmental activity. Graduate students attend various courses offered by the departmental staff and carry out research in one of the research groups directed by the staff members. Presently, research is being conducted in the following areas: developmental biology, mammalian genetics, animal physiology, limnology, cytology, plant physiology, plant pathology, nutrition, microbial physiology, microbial genetics and virology.

Offices and adjoining research areas for staff, located on the west side of each floor, are special features of this building, and are separate from, but near to, the undergraduate laboratories.

In addition, there are various specialized areas which include the following:

The animal quarters occupy an extensive complex of 3,000 square feet on the north corner of the building. This area includes diverse facilities such as rooms for experimental colonies of mammals; operating rooms; parasitology and isolation rooms. The cleaning area is equipped with automatic cage-washing facilities.

An electron microscope complex occupies an area of 1,000 square feet housing a recently acquired RCA microscope and associated preparation area, cutting room and dark room. These facilities are used by several faculty-student research groups.

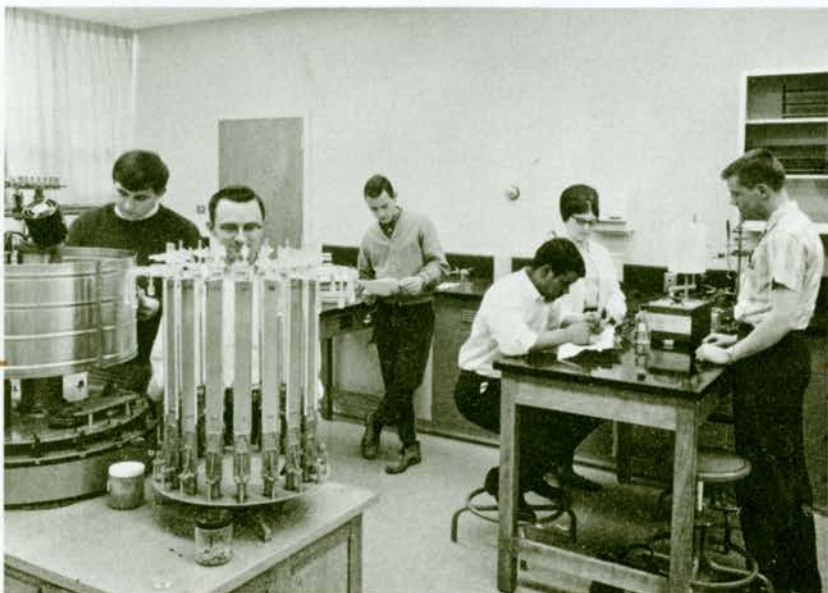




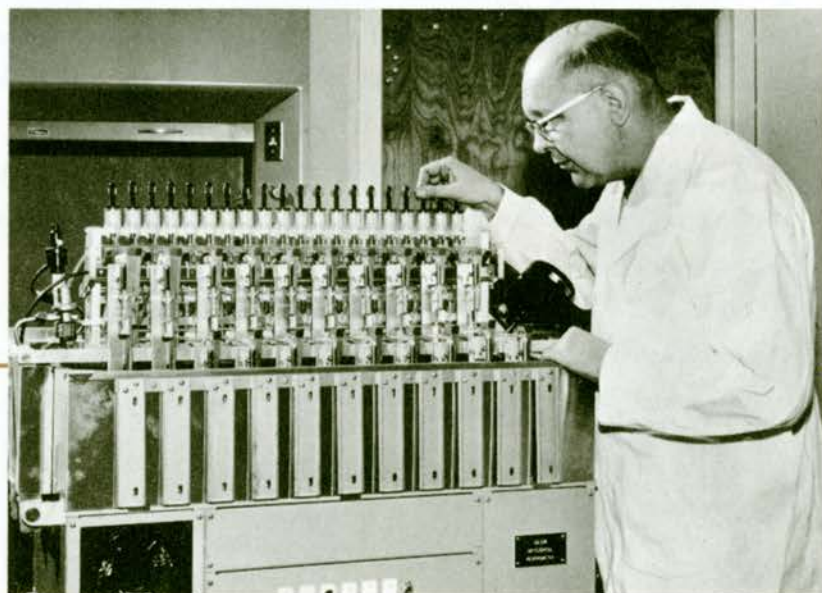
INVERTEBRATE ZOOLOGY RESEARCH LABORATORY



EXAMINING PLANT SPECIMENS FOR DISEASE



STUDENTS EXPERIMENTING IN CELL PHYSIOLOGY



STAFF MEMBER WITH NEW DIFFERENTIAL RESPIROMETER



## Research Keys Post-Graduate Studies

The plant-growth-substances laboratory includes facilities for chromatography, plant tissue culture with transfer rooms, and dark rooms for studies involving plant hormones.

A specially constructed radiosotope laboratory with facilities for counting, is another important feature of graduate research. A recent acquisition is a liquid scintillation counter.

Facilities for studies of plant growth on the top floor include six plant-growth-chambers, eight Wisconsin soil tanks, with controlled light, temperature and humidity, in addition to 4,500 square feet of greenhouse space. Plant materials for teaching, research and collection items are maintained in the greenhouse.

A well-equipped stock room, with adjoining facilities for washing and media-preparation, and a shop, serve faculty and students on all floors of the department by way of a centrally located dumb-waiter.

Some of the modern facilities available in the department are a variety of spectrophotometers, an ultra-centrifuge, refrigerated preparative centrifuges, a differential respirometer, an electron microscope, a scintillation counter, polygraph, marine aquaria, etc.



INSTRUCTION IN OPERATION OF SPECTROPHOTOMETER



CONTROLLED-ENVIRONMENT CHAMBERS FOR PLANT GROWTH

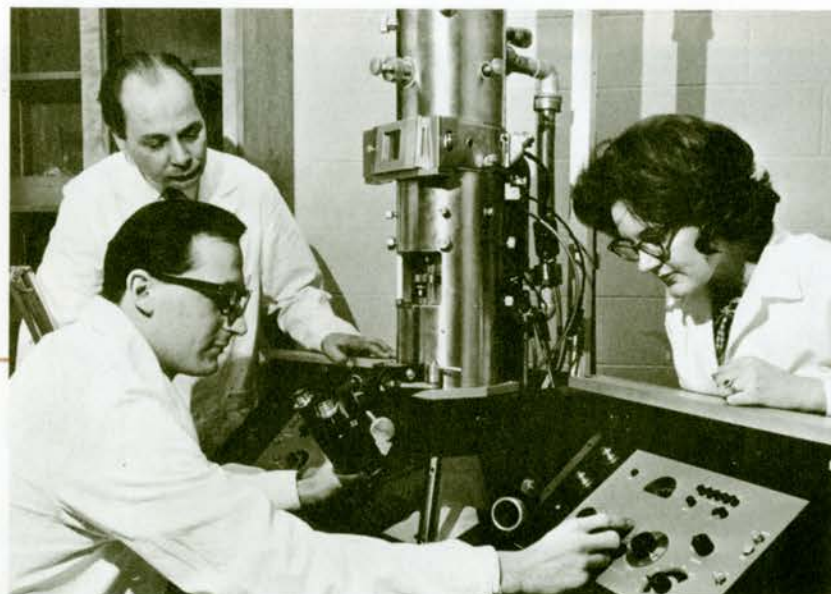




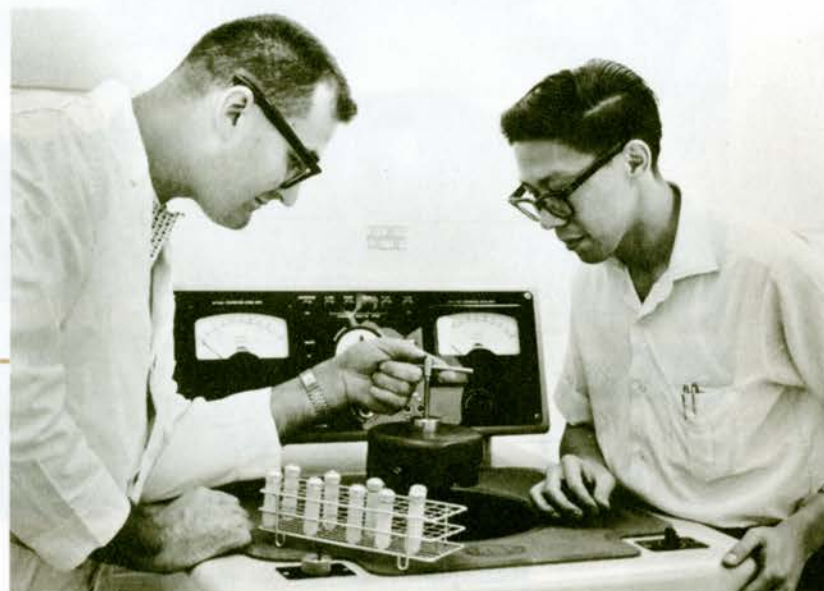
EXPERIMENT USING RADIOACTIVE TRACER METHODS



SECTION OF ONE OF FOUR ROOF-TOP GREENHOUSES



ELECTRON MICROSCOPE IN OPERATION



START OF AN ULTRA-CENTRIFUGE RUN





AN ELECTRONIC COMPUTER CENTRE SERVES ALL DEPARTMENTS

## OTHER OPPORTUNITIES

In preparing for an anticipated enrolment of 5,000 students by 1970, compared to the 1966 enrolment of approximately 2,900 full-time students, the University of Windsor is constructing other new facilities and increasing its academic staff to meet the new demands.

These efforts are assisted by the fact that postdoctorate fellowships and postgraduate scholarships, offered by the National Research Council of Canada, are tenable at the University of Windsor, as are the Province of Ontario graduate fellowships. Additionally, the various departments of the University offer teaching fellowships and research assistantships to qualified candidates.

But educational opportunity and challenge are inspired mostly by the character and spirit of an institution and its people. At the University of Windsor a community of academic endeavour, which is both stimulating and rewarding, continues to develop.



UNIVERSITY CENTRE PROVIDES FOOD, CULTURAL AND RECREATIONAL SERVICES FOR ALL STUDENTS



A FILM STUDIO IS THE CORE OF AN ENTIRE BUILDING CONVERTED IN 1966 TO CLOSED-CIRCUIT TV LECTURES



# ACADEMIC STAFF

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## Department of Biology

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ROBERT J. DOYLE

B.A., M.A., M.Sc., Ph.D. (Wayne State)

*Associate Professor and Head of the Department*

W. G. BENEDICT

B.S.A., Ph.D. (Toronto)

*Professor*

C. C. KUEHNER

B.Sc., M.Sc., Ph.D. (Ohio State)

*Associate Professor*

H. D. McCURDY

B.A., B.Sc., M.Sc., Ph.D. (Michigan State)

*Associate Professor*

M. L. PETRAS

B.Sc., M.S., Ph.D. (Michigan)

*Associate Professor*

J. R. DOUGHERTY, C.S.B.

B.A., S.T.B., M.S. (Cornell)

*Assistant Professor*

D. T. N. PILLAY

B.Sc.Ag., M.S., Ph.D. (Cornell)

*Assistant Professor*

J. E. J. HABOWSKY

Diploma-Landwirt (B.S.A.), M.S.A.,

Ph.D. (Toronto)

*Assistant Professor*

J. M. WINNER

B.S., M.S. (Notre Dame)

*Assistant Professor*

L. R. SABINA

A.B., M.S., Ph.D. (Nebraska)

*Assistant Professor*

A. H. WARNER

B.A., M.A., Ph.D. (Southern Illinois)

*Assistant Professor*

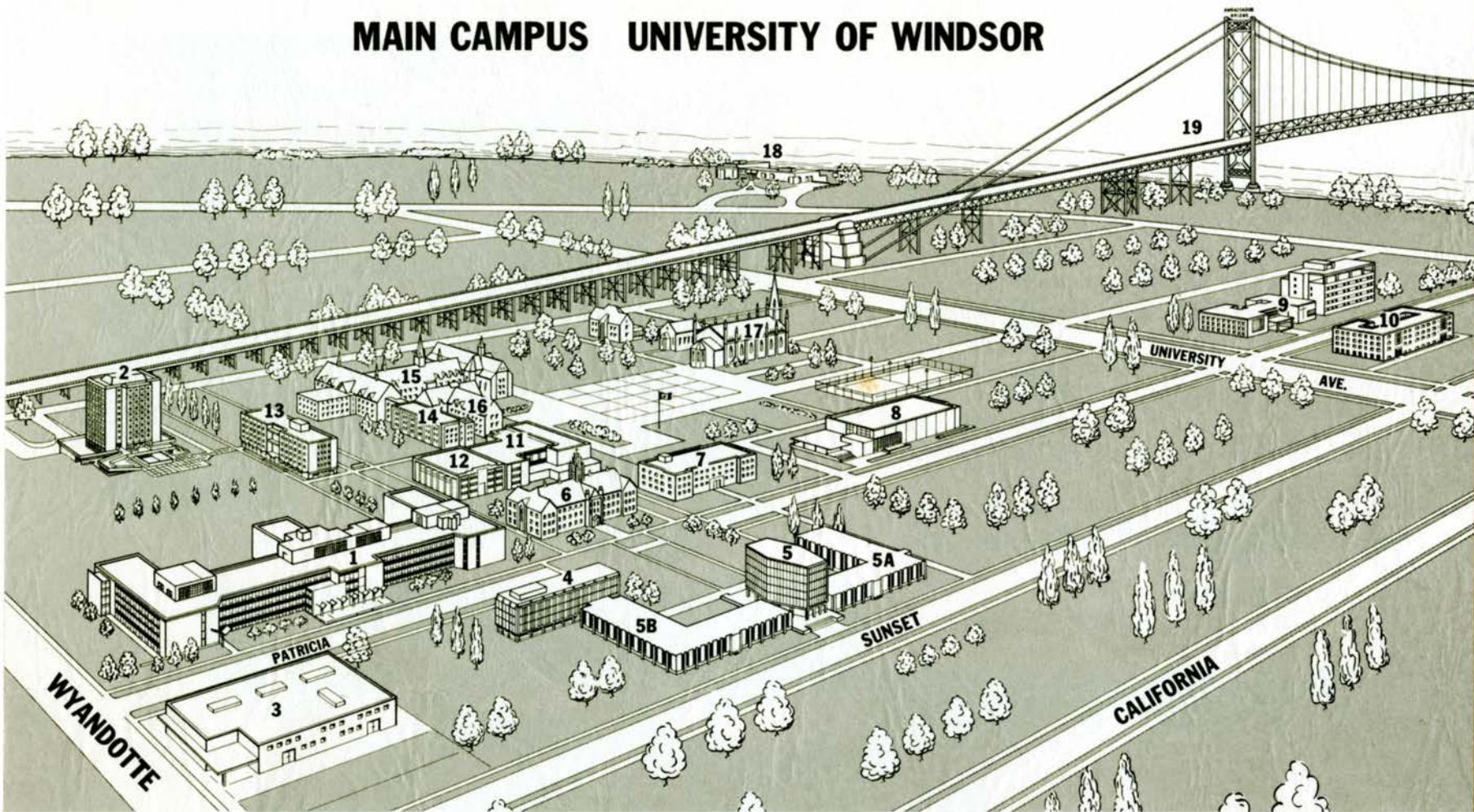
*Sessional Instructors* MRS. G. WINNER B.Sc. (Wales)

MRS. K. LADD B.A., M.Sc. (Western Ontario)

*Chief Technician* F. M. LUKACS B.Sc. (Assumption)



# MAIN CAMPUS UNIVERSITY OF WINDSOR



1. Essex Hall  
(Engineering, Mathematics, Chemistry, Physics; 1961-64)
2. Men's Residence  
(1967)
3. Temporary Fine Arts Building  
(1966)
4. Biology Building  
(1966)
5. Windsor Hall  
(Administration Tower; 1965)  
(a) North Academic Wing  
(1965)  
(b) South Academic Wing  
(1967)
6. Dillon Hall  
(classrooms; 1928)

7. Memorial Hall  
(closed-circuit TV, 1948-66)
8. University Library  
(1958)
9. Electa Hall  
(Women's residence; 1958-63)
10. Canterbury College  
(residence; 1966)
11. University Centre  
(1962)
12. St. Denis Hall  
(gymnasium and swimming pool; 1916, 1948)
13. Cody Hall  
(men's residence; 1962)
14. St. Michael's Hall  
(men's residence; 1915)

15. Assumption University  
(1857)
16. Canterbury College  
(1928-1965)
17. Assumption Church  
(1748)
18. St. Basil's Hall  
(Basilian Fathers' House of Studies; 1965)
19. Ambassador Bridge to  
Detroit, Mich.

## Not Shown:

- Holy Redeemer College  
(National Redemptorist Seminary; 1958;  
on Highway 3)
- North campus  
(track and field, 1966)